

LISTING OF CLAIMS

The following listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently amended) A purified interferon- α polypeptide, comprising
a first amino acid sequence consisting of residues 1-75 of interferon- α 21b;
a second amino acid sequence consisting of residues 76-81 of interferon- α 2c or residues 76-81 of
interferon- α 21b;
a third amino acid sequence consisting of the sequence LDKFXTELXQQLND (SEQ ID NO: 43)
or the sequence LEKFXTELXQQLND (SEQ ID NO: 44), wherein X is any amino acid residue; and
a fourth amino acid sequence consisting of residues 96-166 of interferon- α 2c;
wherein the hybrid interferon- α polypeptide has interferon- α protein biological activity.
2. (Previously presented) The purified interferon- α polypeptide according to claim 1,
wherein the second amino acid sequence consists of residues 76-81 of interferon- α 2c.
3. (Previously presented) The purified interferon- α polypeptide according to claim 1,
wherein the second amino acid sequence consists of residues 76-81 of interferon- α 21b.
4. (Currently amended) The purified interferon- α polypeptide according to claim 1,
wherein the third amino acid sequence consists of the sequence LDKFXTELXQQLND (SEQ ID NO: 43).
5. (Currently amended) The purified interferon- α polypeptide according to claim 1,
wherein the third amino acid sequence consists of the sequence LEKFXTELXQQLND (SEQ ID NO: 44).
6. (Currently amended) The hybrid interferon polypeptide according to claim 1, wherein
the second amino acid sequence consists of residues 76-81 of interferon- α 2c and the third amino acid
sequence consists of the sequence LEKFXTELXQQLND (SEQ ID NO: 44).
7. (Previously presented) The hybrid interferon- α polypeptide according to claim 6,
comprising an amino acid sequence with a structure M-N-O-P, wherein M consists of amino acid residues
1-75 of interferon- α 21b, N consists of amino acid residues 76 to 81 of interferon- α 2c, O consists of amino

acid residues 82 to 95 of interferon- α 21b, and P consists of amino acid residues 96 to 166 of interferon- α 2c.

8. (Currently amended) The hybrid interferon- α polypeptide according to claim 1, wherein the second amino acid sequence consists of residues 76-81 of interferon- α 2c and the third amino acid sequence consists of the sequence LDKFXTELXQQLND (SEQ ID NO: 43).

9. (Currently amended) The hybrid interferon- α polypeptide according to claim 1, wherein the second amino acid sequence consists of residues wherein the second amino acid sequence consists of residues 76-81 of interferon- α 21b and the third amino acid sequence consists of the sequence LDKFXTELXQQLND (SEQ ID NO: 43).

10. (Previously presented) The hybrid interferon- α polypeptide according to claim 1, comprising an amino acid sequence selected from the group consisting of an amino acid sequence as set forth in SEQ ID NOS: 9, 11, 30, 32, 36, 38, 40, and 42.

11. (Previously presented) The hybrid interferon- α polypeptide according to claim 10, wherein the sequence is selected from the group consisting of an amino acid sequence as set forth in SEQ ID NOS: 9, 32, 36, and 38.

12. (Previously presented) The hybrid interferon- α polypeptide according to claim 1, wherein the second amino acid sequence consists of amino acid residues 76-95 of interferon- α 2c.

13. (Previously presented) The hybrid interferon- α polypeptide according to claim 1, wherein the second amino acid sequence consists of amino acid residues 76-95 of interferon- α 21b.

14. (Currently amended) The hybrid interferon- α polypeptide according to claim 8, wherein the second amino acid sequence consists of residues wherein the second amino acid sequence consists of residues 76-81 of interferon- α 21b and the third amino acid sequence consists of the sequence LEKFXTELXQQLND (SEQ ID NO: 44).

15. (Previously presented) A nucleic acid molecule encoding a polypeptide according to claim 1.

16. (Original) A recombinant vector comprising the nucleic acid molecule according to claim 15.

17. (Original) A cell transformed with the recombinant vector according to claim 16.

18. (Previously presented) A pharmaceutical composition comprising:
a pharmaceutically acceptable vehicle or carrier; and
at least one hybrid interferon- α polypeptide according to claim 1.

19-23. (Cancelled).

24. (Previously presented) A nucleic acid molecule encoding a polypeptide according to claim 10.

25. (Previously presented) A nucleic acid molecule according to claim 24, having a nucleic acid sequence as set forth in SEQ ID NO: 8, 10, 29, 31, 35, 37, 39, or 41.

26. (Previously presented) A recombinant vector comprising the nucleic acid molecule according to claim 24.

27. (Previously presented) A cell transformed with the recombinant vector according to claim 26.

28. (Previously presented) A pharmaceutical composition comprising:
a pharmaceutically acceptable vehicle or carrier; and
at least one hybrid interferon- α polypeptide according to claim 10.